

Claims

[1] A hydraulic operation controlling unit, comprising: an engine; a hydraulic pump that is operated by this engine; a hydraulic actuator that is operated by pressurized oil that is discharged from this hydraulic pump; an engine controlling means for controlling an output of said engine; and a hydraulic pump absorbing torque controlling means for controlling an absorbing torque of said hydraulic pump, characterized in that

a matching point where the output torque of said engine and the absorbing torque of said hydraulic pump coincide with each other is predetermined in accordance with work contents, said engine controlling means controls the output of said engine in such a manner that output properties of said engine become equi-horsepower properties or approximately equi-horsepower properties in a predetermined range of the engine speed which includes an engine speed that corresponds to said matching point, and said hydraulic pump absorbing torque controlling means controls the absorbing torque of said

hydraulic pump in such a manner that the output torque of said engine that corresponds to said matching point and the absorbing torque of said hydraulic pump are made to coincide with each other by increasing or reducing the absorbing torque of said hydraulic pump in accordance with an increase and a decrease in the engine speed.

[2] The hydraulic operation controlling unit according to Claim 1, wherein a memory means for storing a relationship between the output torque of said engine and the engine speed, and an engine speed detecting means for detecting an actual engine speed of said engine, are provided, and said engine controlling means obtains a torque value that is to be outputted by said engine from the relationship between the output torque of said engine and the engine speed that are stored in said memory means and the actual engine speed that is detected by said engine speed detecting means, so that the output of said engine can be controlled on a basis of the torque value that has been obtained.

[3] A hydraulic excavator, characterized by comprising the hydraulic operation controlling unit according to Claim 1 or 2.